

Title (en)

Cyclohexene derivative having alkenyl, liquid crystal composition and liquid crystal display device

Title (de)

Cyclohexen-Derivate mit Alkenyl, Flüssigkristallzusammensetzung und Flüssigkristallanzeigevorrichtung

Title (fr)

Dérivé de cyclohexène doté d'alcényle, composition de cristaux liquides et appareil d'affichage à cristaux liquides

Publication

**EP 1903090 A2 20080326 (EN)**

Application

**EP 07253349 A 20070824**

Priority

JP 2006242156 A 20060906

Abstract (en)

A liquid crystal compound selected from a group of compounds represented by formula (a): wherein Ra and Rb are each independently hydrogen, alkyl having 1 to 10 carbons or alkenyl having 2 to 10 carbons, provided that in the alkyl, -CH<sub>2</sub>- may be replaced by -O-, but plural -O- are not adjacent to each other, and hydrogen may be replaced by fluorine; ring A 1 and ring A 2 are each independently trans-1,4-cyclohexylene or 1,4-phenylene, provided that one or two hydrogens of the 1,4-phenylene may be replaced by halogen, and in a 6-membered ring of these groups, one -CH<sub>2</sub>- or two -CH<sub>2</sub>- that are not adjacent to each other may be replaced by -O-, and one or two -CH= may be replaced by -N=; Z 1 and Z 2 are each independently a single bond, -(CH<sub>2</sub>)<sub>2</sub>-, -(CH<sub>2</sub>)<sub>4</sub>-, -CH=CH-, -C≡C-, -CH<sub>2</sub>O- -OCH<sub>2</sub>-, -COO-, -OCO- or -OCF<sub>2</sub>-; 1 and m are each independently 0, 1 or 2, provided that 1+m is 0, 1, 2 or 3; and n is an integer of from 0 to 6, provided that in -(CH<sub>2</sub>)<sub>n</sub>-, -CH<sub>2</sub>- may be replaced by -O-, but plural -O- are not adjacent to each other, and hydrogen may be replaced by fluorine.

IPC 8 full level

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CPC (source: EP US)

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Citation (applicant)

- JP H024725 A 19900109 - MERCK PATENT GMBH
- GB 2216523 A 19891011 - MERCK PATENT GMBH [DE]
- JP 2000053602 A 20000222 - CHISSO CORP
- EP 0969071 A1 20000105 - CHISSO CORP [JP]
- JP H10237075 A 19980908 - CHISSO CORP
- JP H024723 A 19900109 - MERCK PATENT GMBH
- CH 678947 A5 19911129 - MERCK PATENT GMBH
- JP 2002193853 A 20020710 - MERCK PATENT GMBH
- DE 10157670 A1 20020620 - MERCK PATENT GMBH [DE]
- WO 8908633 A1 19890921 - MERCK PATENT GMBH [DE]
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- EP 1333017 A2 20030806 - MERCK PATENT GMBH [DE]

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AL BA HR MK YU

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DOCDB simple family (application)

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